

FACT SHEET #14: Visible Emissions and Opacity

What is Opacity?

Opacity is the reduction in visibility caused by a cloud of dust. The standard limitation for visible emissions within Maricopa County is 20 percent opacity.

How Much is 20 Percent Opacity?

County inspectors are trained to read opacity, but there are ways that you can estimate opacity on the job. Twenty percent (20%) opacity is a faint cloud of dust through which you can readily see background details.

When Are Controls of Visible Emissions Required?

Measures controlling visible emissions must be implemented during all periods of dust generating operations. The specific dust control measures, including contingency measures, are contained in the Dust Control Plan which is part of each regulated site's earthmoving permit.

A regulated site should implement contingency measures as necessary to prevent visible emissions from reaching 20% opacity, rather than waiting until emissions reach that level. Additional precautions should be taken to prevent the dust cloud from crossing the property line.

When Does the Opacity Limitation Apply?

The 20 percent opacity limitation applies at all times except when the average wind speed is greater than 25 miles per hour, provided that all reasonably available control measures contained in the approved Dust Control Plan are in place.

Visible Emissions Testing

The Arizona Department of Environmental Quality (ADEQ) holds classes twice a year in various locations throughout the state to train and certify individuals in reading opacity. While not mandatory, all construction superintendents, project managers, and foremen are encouraged to attend. Becoming certified enables you to determine your project's level of compliance with opacity guidelines or requirements. Contact ADEQ at (602) 506-6700 for details on class times and locations.